

Planetary UV-Vis-NIR Science Project

Completed Technology Project (2014 - 2016)



Project Introduction

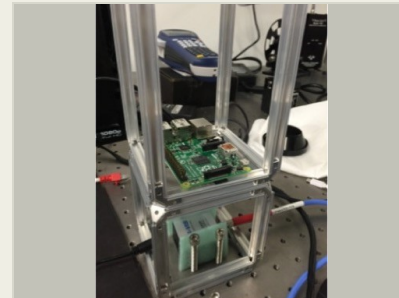
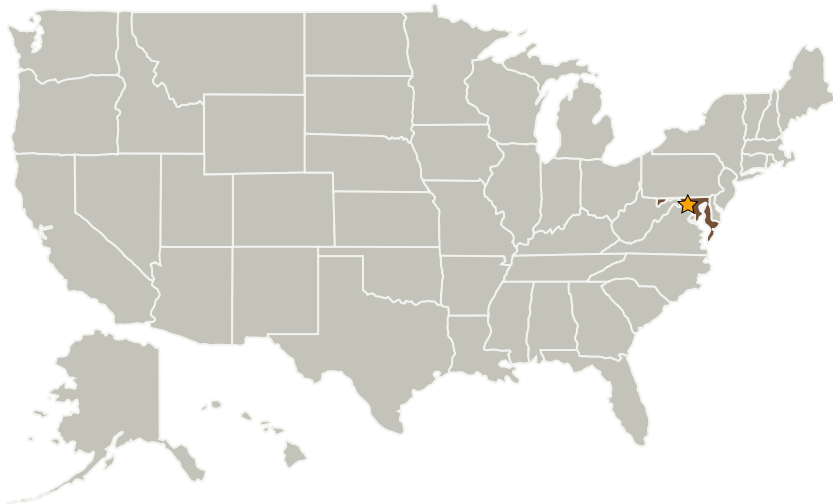
An infrastructure for integrating a UV-Vis-NIR spectrometer that can address broad planetary science goals will be developed. Earth and other solar system bodies have characteristic spectral signatures in this spectral range. Results will be used to explore the new concept for planetary science missions and evaluate system parameters.

A system that integrates a commercially available UV- Vis-NIR spectrometer will be developed for studying planetary objects. Trade studies will be performed to explore application limits in furthering planetary and earth science goals. The signal-to-noise is also sufficient to look for particular Mineralogical signatures in the UV.

Anticipated Benefits

A robust, weight and power optimized UV-Vis-NIR spectrometer with broad crosscutting applications.

Primary U.S. Work Locations and Key Partners



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Organizations Performing Work	Role	Type	Location
★Goddard Space Flight Center(GSFC)	Lead Organization	NASA Center	Greenbelt, Maryland

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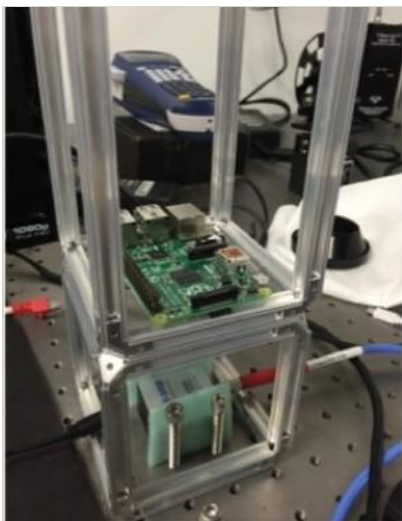
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Primary U.S. Work Locations

Maryland

Images



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(<https://techport.nasa.gov/image/19357>)

Links

NTR 1438288584
(no url provided)

Project Website:

<http://sciences.gsfc.nasa.gov/sed/>

Organizational Responsibility

Responsible Mission Directorate:

Mission Support Directorate (MSD)

Lead Center / Facility:

Goddard Space Flight Center (GSFC)

Responsible Program:

Center Independent Research & Development: GSFC IRAD

Project Management

Program Manager:

Peter M Hughes

Project Manager:

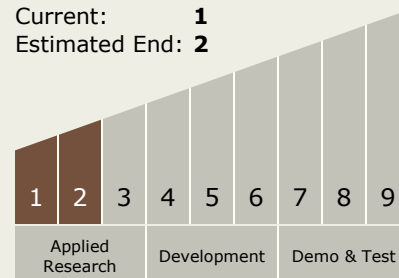
Brook Lakew

Principal Investigator:

Shahid Aslam

Technology Maturity (TRL)

Start: **1**
Current: **1**
Estimated End: **2**



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Technology Areas

Primary:

- TX08 Sensors and Instruments
 - └ TX08.1 Remote Sensing Instruments/Sensors
 - └ TX08.1.1 Detectors and Focal Planes